

# Export Control Program

# Researcher Training

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## Introduction



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## What is Export Control?

- Export control consists of a group of federal laws / regulations that control certain commodities, technologies, information and data
  - Limits what can be shipped out of the country and to whom it can be shipped
  - Can limit access to information for certain foreign nationals and/or organizations
  - Determines when a license is required to ship items or information abroad



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## Purpose of the Regulations

- To control the export of military and dual use products, technology and services to foreign persons or organizations
  - Primarily for national security purposes
  - Some economic reasons as well
  - Dual Use: commercial items that could have military, national security or proliferation applications
    - Ex: computer technology and software, sensors, lasers



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## Why Do We Care (about Export Control)?

- It's the law (we need to comply with the regulations)
- These regulations can affect:
  - What type of research we do
  - Who we hire
  - Who we can share information with
  - Who we work with (collaborators / sponsors)
  - Where we ship items
  - What items we ship
  - Level of security for projects / labs



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## Definitions



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## *Export*

- Physical Export: Sending or taking anything out of the United States in any manner, except mere travel outside of the U.S. by a person whose personal knowledge includes technical data; including:
  - Shipping – commercial shippers or hand-carry
  - Verbal transfer of technical data (i.e., phone, Skype)
  - Electronic transfer of technical data (i.e., e-mail, fax, text, social media)
  - Items: computers, equipment, biological agents, materials, substances, etc.
- Deemed Export: See next page
- Defense Service: Performed for or on behalf of a foreign person or organization





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## ***Deemed Export***

- Transfer (oral or visual disclosure) of technology, information or data to a foreign person within the U.S. is deemed to be an export to that person's home country
  - Deemed exports are treated in the same manner as a physical export to a foreign country
  - Foreign person needs to have knowledge to understand/interpret what they are seeing/hearing
- Examples of deemed export:
  - Foreign collaborators @ UW working on controlled technology
  - Phone calls regarding controlled technology w/ foreign collaborators working @ another U.S. university
  - Taking foreign visitors on a tour of a lab where they can view design details of controlled technology
  - Discussions regarding controlled technology w/ foreign persons at a conference w/in the U.S.



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## *Foreign Persons/Organizations*

- A Foreign Person or Organization is anyone who is NOT a U.S. Person. A U.S. Person is:
  - U.S. citizen or national
  - Permanent resident (green card holder) of the U.S.
  - A refugee, someone granted political asylum or someone granted amnesty
  - U.S. government agency and any state or local governments therein
  - U.S. company, business, LLC or partnership
  - U.S. university





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## Regulations

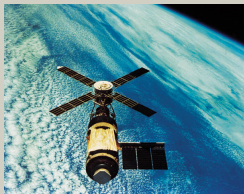


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## ITAR

<b>Name of Regulation:</b>	International Traffic in Arms Regulations
<b>Agency:</b>	State Dept.
<b>Items Controlled:</b>	Military equipment & information
<b>Listing:</b>	United States Munitions List (22 categories) – 22CFR 121
<b>Comments:</b>	Treats all foreign destinations the same
<b>UW Examples:</b>	<p>Category IV: Launch vehicles, missiles, rockets,....</p> <ul style="list-style-type: none"><li>• StarTracker</li></ul> <p>Category VII: Tanks and military vehicles</p> <ul style="list-style-type: none"><li>• Terrain displacement under treaded vehicles</li></ul> <p>Category XII: Fire Control, optical, guidance and control equip.</p> <ul style="list-style-type: none"><li>• NIR detector</li><li>• AERI crycooler</li></ul> <p>Category XV: Spacecraft systems and associated equipment</p> <ul style="list-style-type: none"><li>• GOES-R</li></ul>



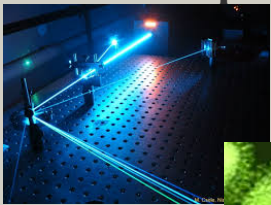


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## EAR

<b>Name of Regulation:</b>	Export Administration Regulations
<b>Agency:</b>	Commerce Dept.
<b>Items Controlled:</b>	Dual use items & information
<b>Listing:</b>	Commerce Control List (10 categories) – 15CFR 774, Supp 1
<b>Comments:</b>	Need for a license depends on commodity, destination country, reason for control & exemptions
<b>UW Examples:</b>	Category 1: Select agents Category 3: Electronics, such as multimeters, digital I/Os, D/A converters and integrated circuits Category 4: Computers and related equipment Category 5: Telecommunications equipment, ethernet switches, remote control power switches, encryption software Category 6: Lasers, optical sensors





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## ***FACR***

<b>Name of Regulation:</b>	Foreign Asset Control Regulations
<b>Agency:</b>	Treasury Dept.
<b>Items Controlled:</b>	Foreign assets (bank accounts)
<b>Listing:</b>	Specially designated nationals list
<b>Comments:</b>	More concerned with whom you are communicating rather than what you are communicating
<b>Examples:</b>	<ul style="list-style-type: none"><li>• Benevolence International Foundation, Oak Lawn, IL</li><li>• Ukrainian-Mediterranean Airlines, Kiev, Ukraine</li><li>• Malek Ashtar University of Technology, Tehran, Iran</li><li>• Electronics Institute, Damascus, Syria</li><li>• A-Team Chemicals Company LTD., Bangkok, Thailand</li><li>• China Enriching Chemistry Limited, Shanghai, China</li><li>• Proton Petrochemicals Shipping Limited, Nicosia, Cyprus</li></ul>



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## Software

- Software can be included in any of the export control categories
  - Please review any software that is involved with a project to determine if it is export controlled
- Encryption
  - Encryption presents its own set of special rules under EAR and ITAR
  - Use of encryption on any project may require a license when foreign nationals are involved
  - Even if a license is not required, a classification report may need to be submitted

**For additional information on software, please see:**

<https://kb.wisc.edu/images/group156/shared/ExportControl/software.160317.pdf>



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## ***Exemptions for Universities***

- ***Fundamental Research Exemption (ITAR, EAR)***
  - *No license is required for fundamental research – basic or applied research in science or engineering – at an accredited institution of higher learning in the U.S. and resulting in information that is ordinarily published and shared broadly in the scientific community*
- ***Public Domain Exemption (ITAR, EAR)***
  - *No license is required to export information or research that are generally available in the public domain. This does not apply to physical equipment, materials, substances, etc.*
- ***Education Exemption (ITAR, EAR)***
  - *No license is required to transfer information to students, including foreign nationals, concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges or universities*
- ***Employment Exemption (ITAR only)***
  - *No license is required to transfer export controlled information to a foreign national if the foreign national: (1) is a bonafide, full-time employee of the UW, (2) is not a national of certain countries of concern, (3) has a permanent residence in the U.S. while employed at the UW, (4) has been informed in writing not to transfer information to other foreign persons*



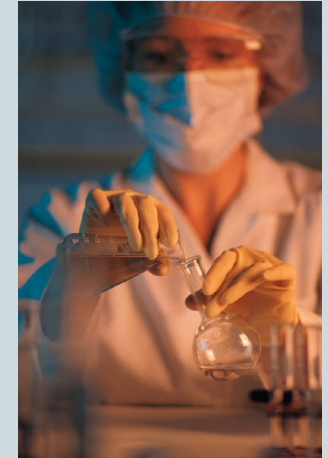


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## Services

- **Service - Work done for hire that is not considered research**
  - University exemptions do not apply
- **Examples:**
  - Analysis of unknown pharmaceutical substances
  - Manufacturing items that are incorporated into commercial devices
  - Providing materials for outside university or commercial research
- **Concerns**
  - Physical export of controlled items, technology or information to foreign persons
  - Services conducted at UW by foreign staff/students using controlled technology (deemed export)





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## Non-Compliances



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## Results of Non-Compliance

- *Civil & criminal penalties levied against individuals & organizations*
- *Disciplinary action by university toward responsible individual*
- *Bad press*
- *Loss of research funding*

***You can be held personally liable for non-compliance***





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***- Responsibility to comply lies with individual -***

## Case of J. Reece Roth - U of Tenn (Sept 2008)

- *Retired professor in plasma physics*
- *Convicted on 18 counts of conspiracy, fraud & violating ITAR*
- *Gave 2 grad students from China & Iran access to sensitive info*
- *Sentence - 48 months in prison*
  - *Worst case: 175 yrs in prison; \$15.5M*

## Humane Restraint - Waunakee (June 2012)

- *Manufacturer of restraining devices for police & hospitals*
- *32 charges of shipping restraints w/o export licenses*
- *\$465K fine, reducible to \$50K, if they do not commit additional violations over the next 2 yrs*

## Teledyne LeCroy, New York (June 2015)

- *Exporting 2 oscilloscopes (3A292) to Beihang University, China (an entity-listed university)*
- *Failed to get export licenses & file accurate shipping documentations;*
- *Value of oscilloscopes < \$16K*
- *Fine = \$75K*



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## Identifying Issues



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Finding export control issues is much like looking for a golf ball in a haystack





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## Discovering Issues

The Export Control Office reviews a number of processes to unearth issues, including:

- **Project Screening** – Using the WISPER screening tool
- **Visa Certification** – For H-1B and O-1 visas
- **Outgoing International Material Transfer Agreements (MTAs)**
- **International Travel** – Weekly review of Concur bookings
- **Vendor Screenings**
- **Project Reviews** – Questions from staff regarding projects, staffing, shipping, etc.



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## Red Flags

For Export Control

1) The contract contains one or more of the following:

- Publication restrictions
- Personnel restrictions
- Export control paragraph
  - Ask for ITAR or EAR classification

*RSP typically does not accept these restrictions*

2) Technical information received under a NDA

3) Shipping items or information overseas

4) Working with foreign collaborators here or abroad





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## International Shipping & Travel



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## International Shipping

### ■ Who?

- To whom are you shipping? Is the recipient a restricted party?
- Do you know who the end user is?



### ■ What?

- Some items require an export license (i.e., military equipment; spaceflight H/W or S/W; select agents; some lasers; high speed cameras; night vision goggles)

### ■ Where?

- **E:1 Countries: Crimea, Cuba, Iran, North Korea, Sudan, Syria – Major restrictions**
- **OFAC & US Embargo List:** Balkans (western), Belarus, Burundi, Central African Republic, Cuba, Congo, Iran, Iraq, Lebanon, Libya, N. Korea, Somalia, South Sudan-related, Sudan and Darfur, Syria, Ukraine/Russia-related, Venezuela, Yemen-related, Zimbabwe
- **ITAR Prohibited Countries (22CFR 126.1):** Afghanistan, Belarus, Burma, Central African Republic, China, Congo, Cuba, Cyprus, Eritrea, Haiti, Iran, Iraq, Lebanon, Libya, N. Korea, Somalia, Sudan, Syria, Venezuela, Zimbabwe

*For additional information & examples, see the Shipping training @*  
<https://kb.wisc.edu/images/group156/shared/ExportControl/shippingtraining.150105.pdf>



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## International Travel

- **Where?**
  - Similar destination concerns as shipping
- **Why?**
  - Conferences, meetings – What do you plan to discuss?
  - Research – Is this fundamental research?
- **Who?**
  - Are you meeting with specific persons?
  - Some foreign universities are subject to restrictions by the federal gov't
- **What?**
  - An export license may be required when traveling and taking something on a plane either in checked or hand-carried luggage
  - Hand-carry to a foreign country = ship to a foreign country





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## International Travel (cont.)

### ▪ **AES Submissions**

- U.S. Customs will require you to submit an Electronic Export Information filing (EEI) two (2) hours prior to your departure if you are carrying:
  - If the item being hand-carried requires an export license
  - The value of the items hand-carried are  $\geq$ \$2500 for a single tariff code (Schedule B code)
  - Rough diamonds

### ▪ **Hand-carried Items**

- Complete a commercial invoice and forward to your customs broker to complete the EEI filing

### ▪ **Exemptions**

- Tools of the Trade: For UW-owned equipment that is used for work purposes
- BAG: For personally-owned equipment that is taken out the country

### ▪ **Clean laptop program**





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**What Do You Do When  
You Find An Issue?**



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## Lab Security

- **In some cases lab security needs to be implemented to prevent unauthorized persons from having access to controlled items**
  - Lab security measures are described in the TCP
- **Types of security**
  - Lab: Door locks, key access
  - Equipment: Lockouts
  - Materials: Lockboxes
  - Computer: Password protection, encryption
- **Adequate control may prevent need for deemed export licenses**





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## Technology Control Plan (TCP)

- **Prevent unauthorized access to controlled equipment, materials, technology, software, information or data**
- **Written plan describing:**
  - What items are controlled
  - Where the items are located
  - Who can have access
  - How the access is controlled (see lab security)
- **Developed in collaboration between PI and Export Control Office**
- **All lab staff should review and sign off on TCP**
- **Adequate control may prevent need for deemed export licenses**





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## Export Licenses

- **Not the “end of the world”**
  - Typically takes 1-2 months to submit and receive approval on licenses from the Depts. of Commerce and State
  - Export Control Office submits about 6 license applications a year (average 2010-2017)
- **Notify Export Control Office if an export license may be needed**
  - Develop license strategy
    - Can we manage information to prevent the need for a license?
    - Is there an exception we can use?
    - Type of license (EAR or ITAR)
    - When is the license needed?



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## Contact Information



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## **For Additional Information, Contact:**

- *Tom Demke, UW-Madison Export Control Officer*  
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- *Ben Griffiths, UW Senior Legal Counsel*  
[ben.griffiths@wisc.edu](mailto:ben.griffiths@wisc.edu) 263-7400
- *Or e-mail: [exportcontrol@grad.wisc.edu](mailto:exportcontrol@grad.wisc.edu)*

## **UW Export Control Website:**

<https://research.wisc.edu/compliance-policy/export-control/>